BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Investigation on the Commission's Own Motion into the Operations and Practices of Southern California Gas Company with Respect to the Aliso Canyon storage facility and the release of natural gas, and Order to Show Cause Why Southern California Gas Company Should Not Be Sanctioned for Allowing the Uncontrolled Release of Natural Gas from Its Aliso Canyon Storage Facility. (U904G).

FILED
PUBLIC UTILITIES COMMISSION
JUNE 27, 2019
SAN FRANCISCO
I.19-06-016

ORDER INSTITUTING INVESTIGATION AND ORDER TO SHOW CAUSE

I. INTRODUCTION AND STATEMENT OF PURPOSE

By this order, the California Public Utilities Commission (Commission) institutes a formal investigation to determine whether the named Respondent, Southern California Gas Company (SoCalGas), violated any provision(s) of the California Public Utilities Code or other state or federal law, Commission general orders or decisions, or other applicable rules or requirements pertaining to the maintenance of a gas storage facility or the release of natural gas (aka, hydrocarbon) from the Aliso Canyon storage facility. This proceeding will specifically pertain to SoCalGas's maintenance of the Aliso Canyon storage facility and the uncontrolled release of natural gas from October 23, 2015 to February 11, 2016. Further, SoCalGas is ordered to show cause why it should not be sanctioned for allowing the uncontrolled release of natural gas from its Aliso Canyon storage facility.

The Respondent, SoCalGas, is a privately-owned public utility, subject to the safety and rate jurisdiction and regulation of this Commission, and to California law and the Commission's general orders, rules, and decisions. The Commission enforces a

variety of federal and state laws that impose safety requirements pertaining to the design, construction, inspection, testing, operation, and maintenance of utility gas gathering, transmission, and distribution piping systems, and for the safe operation of such lines and equipment. This investigation will assess SoCalGas's compliance with the law pertaining to maintenance and operation of the Aliso Canyon storage facility and the release of natural gas from that facility.

This Order is in response to a root cause analysis (RCA) report issued by Blade Energy Partners Limited (Blade). Blade is the independent consulting company charged with investigating the cause(s) of the uncontrolled release of natural gas from October 23, 2015 to February 11, 2016 at the Aliso Canyon storage facility. To date, Blade has publicly released a main report and four supplementary reports pertaining to the Aliso Canyon storage facility and the uncontrolled release of natural gas. ¹

Blade's *Root Cause Analysis of the Uncontrolled Hydrocarbon Release from Aliso Canyon, Main Report* (Blade Report) finds the leak was primarily due to corrosion and that the corrosion could have been detected before the leak occurred. The Blade Report also found the release of natural gas could have been stopped sooner than the 111 days it took to kill the well.

Based on the Blade Report, the Commission finds it has sufficient evidence and good cause to commence a formal investigation to determine whether SoCalGas violated the Commission's decisions and General Orders, applicable rules and requirements, the Public Utilities Code or other provisions of law.

By initiating this Order, the Commission seeks to: (1) determine whether SoCalGas should be sanctioned, for failing to comply with the Commission's decisions and General Orders, applicable rules and requirements, the Public Utilities Code or other provisions of law; and (2) investigate and address alleged deficiencies in SoCalGas'

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¹ All of Blade's reports are available at: www.cpuc.ca.gov/aliso/ and a copy of the main report is attached to this Order.

operations and maintenance of its gas storage and transportation facilities that may violate Section 451 of the Public Utilities Code or other provisions of the law.

The Commission will accept facts stated in the Blade Reports as accurate, solely for the purpose of commencing this investigation. Certain key factual assertions are stated below. SoCalGas will be provided ample opportunity to contest any factual assertions in the Blade Reports about the Aliso Canyon incident, and to contest any factual assertions made by any other party to this investigation.

II. DESCRIPTION OF THE ALISO CANYON STORAGE FACILITY AND THE UNCONTROLLED RELEASE OF NATURAL GAS

A. Background of the Aliso Canyon Storage Facility

The Aliso Canyon storage facility is located approximately 30 miles northwest of downtown Los Angeles in the northern end of the San Fernando Valley and consists of approximately 114 storage injection and withdrawal wells that were drilled from 1939 to 2014.² The facility was originally used to produce oil.³ SoCalGas purchased the facility in 1971 and converted it to a natural gas storage facility.⁴

Total storage capacity for the Aliso Canyon storage facility is 86 billion cubic feet (Bcf) of natural gas, making it one of the largest natural gas storage facilities in the United States. Natural gas is injected into the old sandstone reservoir formation at approximately 8,500 feet below ground for storage and later withdrawn for transmission and sale in response to market conditions. Stored gas is withdrawn during times of high demand and transported through transmission pipelines to help ensure reliability. ⁵

On October 23, 2015, a leak of natural gas was detected in Standard Sesnon 25 (SS-25), one of the wells at the Aliso Canyon storage facility. The leak continued until

² Blade Report at 15-16.

³ Blade Report at 25.

⁴ Blade Report at 160.

⁵ Blade Report at 21.

⁶ Blade Report at 13.

February 11, 2016. SS-25 was drilled as an oil well in 1954 and converted to a gas storage well in 1973.

Grasping the event requires an understanding of the structure of the SS-25 well bore. The SS-25 well bore consists of three main parts; essentially a small pipe (well annulus) within a medium pipe (intermediate casing) within a large pipe (surface casing). The well annulus of SS-25 (2 7/8") is drilled to below 8,000 feet and was used to extract the oil the well was originally drilled for. The well annulus is contained within intermediate casing (7") which is drilled to approximately 8,500 feet. Both the well annulus and the intermediate casing were contained within the surface casing (11 3/4"). As an oil extracting well, it was operated by withdrawal through only the 2 7/8" annulus casing. By operating only through the annulus casing, any leak would be contained within the 7" intermediate casing. As a gas storage well, however, it was operated by injection and withdrawal through both the annulus casing and the intermediate casing; meaning the 11 3/4" surface casing functioned as a single barrier to the environment or the borehole. These three parts of the well bore are illustrated in Figure 1 below.

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⁷ Blade Report at 13.

⁸ Blade Report at 25.

⁹ Blade Report at 27, Figure 9 and throughout.

CEMENT SON.
CONDUCTOR CASING AQUIFER
CEMENT T,000 R

SURFACE CASING

INTERMEDIATE CASING

DRILLING MUD

CEMENT FRODUCTION CASING GAS-BEARING ROCK LAYER

ROCK LAYER

6.000

WELL ANNULUS

Figure 1 – Schematic of the SS-25 Well Bore

B. The Failure of SS-25 and Release of Natural Gas

The release of natural gas from SS-25 occurred when the 7" intermediate casing failed at approximately 892 feet causing increased pressure on the surface casing which, in turn, caused several of the surface casing regions to fail at 134 to 300 feet. This failure of the surface casing, in turn, caused the resulting release of natural gas through the ground surrounding the well via fissures in the ground. 11

Graphic by Al Granberg

 $[\]frac{10}{2}$ Blade Report at 124 and Chapter 2 generally.

¹¹ Blade Report at 124 and Chapter 2 generally.

Between discovery of the leak and controlling the leak, seven attempts to stop the release of natural gas (kill the well) were attempted, the last on December 22, 2015. All kill attempts failed. The release of natural gas was eventually stopped on February 11, 2016 when a relief well, started on December 4, 2015, intersected with SS-25 allowing SS-25 to be brought under control. SS-25 was subsequently plugged and abandoned.

Additional details about the SS-25 failure and efforts to control the leak are below and in the Blade Report.

III. BLADE INVESTIGATION AND REPORT

On or about January 22, 2016, the Commission and DOGGR initiated a technical root cause analysis (RCA) of the leak at SS-25 by selecting Blade to conduct an independent RCA of the SS-25 well blow out. SoCalGas retained Blade on January 26, 2016 at the direction of the Commission, but Blade performed its RCA without supervision or interference from any entity including the Commission, DOGGR and SoCalGas. Since January 2016 Blade has been conducting an on-going investigation of the cause of this tragedy.

As described in the Blade Report, Blade performed an extensive and detailed investigation that leveraged modern material science technology and tools to evaluate the metallurgy, mechanics, chemistry and microstructure of the tubing and casing. The company also employed the latest state-of-the art diagnostic technologies including Macro-Fractographic Examination, Stereo Microscopy, Micro-Fractographic Examination, Scanning Electron Microscopy (SEM), Focused ion beam (FIB X), and Finite Element Modelling (FEM). Given the strength and effectiveness of these advanced and superior technological tools, Blade was able to diagnose, analyze and draw conclusions on the primary direct causes and root causes of the SS-25 blow-out.

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¹² Blade Report at 158 and Chapter 3 generally.

¹³ Blade Report at 159.

A. Blade Findings Relating to the Origination to the Leak

Blade found the direct cause of the leak was a rupture of the 7" intermediate casing due to microbial corrosion. The corrosion, in turn, was caused by the presence of (1) groundwater accessing the surface casing from outside the well bore and (2) carbon dioxide (a component of natural gas) seeping through the 7" intermediate casing which nourished the formation of the microbes, adding to the corrosion.

The Blade Report identified the root cause of the SS-25 rupture/leak as:

- The lack of detailed <u>follow-up investigation</u>, failure analyses, or RCA of casing leaks, parted casings, or other failure events in the field in the past. There had been over 60 casing leaks at Aliso Canyon before the SS-25 incident, but no failure investigations were ever conducted. Furthermore, external corrosion on production casing had been identified in several wells at Aliso Canyon. Based on the data reviewed by Blade, no investigation of the causes was performed, and, therefore, the extent and consequences of other corrosion in the other wells were not understood.
- The lack of any form of <u>risk assessment</u> focused on wellbore integrity management. This included assessment of qualitative probability of production casing leaks or failures. By extension, the potential consequences of production casing failures or surface blowouts had not been assessed.
- The lack of a <u>dual mechanical barrier</u> system in the wellbore. The 7 in. Outside Diameter (OD) production casing was the primary barrier to the gas.
- The lack of internal policy or any other regulations that required production <u>casing wall thickness inspections</u>. The existing regulations were inadequate at the time. Annual temperature logging and weekly pressure measurements are adequate to detect leaks and fix them only after an event has occurred. In SS-25, the corrosion patch was large (around 9.25 in. in length), and due to the microbial nature, there were grooves within the corrosion patch that acted as stress concentration locations. Consequently, when the corrosion region failed, it resulted in a rupture that was about 2 ft long. The trailing indicators of these failures were not adequate to manage the failures. Methodologies such as periodic wall thickness measurements were necessary.

- The lack of a well-specific <u>well-control plan</u> that considered transient kill modeling or well deliverability. There was no quantitative understanding of well deliverability, although data were available, and well-established industry practices existed for such analysis.
- The lack of <u>understanding of groundwater</u> depths relative to the surface casing shoe and production casing, until the two groundwater wells were drilled at SS-9 in 2018.
- The lack of systematic practices of external <u>corrosion protection</u> for surface casing strings. The consequences of corroded surface casing and uncemented production casing were therefore not understood.
- The lack of a real-time, <u>continuous pressure monitoring</u> system for well surveillance. This prevented an immediate identification of the SS-25 leak and accurate estimation of the gas flow rate. 14

Blade also identifies the lack of accurate and complete records that show data necessary for operations and maintenance related decisions of SS-25, and the rest of Aliso Canyon. 15

SoCalGas knew about the well integrity problems, specifically the presence of corrosion and the lack of a dual mechanical barrier system in the wellbore, which put SoCalGas on notice of the potential for a leak due to exactly what caused the leak at the Aliso Canyon storage facility. Blade opines that these and other events "should have resulted in the development of a formal plan for events with more severe consequences." 16

B. Blade Findings Relating to Continuation of the Leak

1. Lack of Real-Time Monitoring of Well Pressures

Blade explains that the leak started as an axial rupture (open gap in tubing roughly paralleling the direction of the cylinder) in the 7" intermediate casing, but then progressed to a circumferential parting (tubing portion completely separated into two cylinders). Blade estimates 1 to 2 hours elapsed between the axial rupture and the

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¹⁴ Blade Report at 237-8, emphasis added.

¹⁵ See, e.g., Blade Report at 164-5; 170-1; 238; 239.

¹⁶ Blade Report at 239.

circumferential parting.¹⁷ Blade also describes that the axial rupture caused a decrease in the surrounding temperature which, in turn, led to the circumferential parting. The circumferential parting may have been prevented had SoCalGas been monitoring well pressures in real-time and stopped injection before the temperature drop that caused that parting.

2. Inadequate Well Kill Attempts

Controlling a natural gas well involves stopping the associated gas reservoir from flowing into the well bore. To accomplish this, a well-control fluid with sufficient density to overcome the pressure of the formation gas is pumped into the well at a sufficient rate or, as Blade writes, the "two primary design variables are the fluid density and the pump rate." 18

As indicated above, there were seven attempts to stop the release of natural gas (kill the well), but all attempts failed. The release of natural gas was eventually stopped on February 11, 2016 when a relief well, started on December 4, 2015, intersected with SS-25 allowing it to be brought under control.

Blade studied each of the kill attempts and concluded the first attempt "was a reasonable response because the extent of the failure in SS-25 was unknown." Blade found a combination of factors led to the failure to kill the well earlier. Specifically referring to the second kill attempt through to the sixth kill attempt, the Blade Report found that SoCalGas used insufficiently dense fluid along with insufficient pump rates in its attempts to kill the well. SoCalGas also did no modeling of the kill attempts prior to kill attempts one through six even though well kill modeling software is available. Modeling the kill attempts would have resulted in stopping the leak earlier then February 11, 2016.

¹⁷ Blade Report at 124.

¹⁸ Blade Report at 144.

¹⁹ Blade Report at 148.

For the second kill attempt, Blade found the "fluid was not dense enough to kill the well at a realistic pump rate." Blade's analyses indicate that the fluid densities were not high enough to kill the well at realistic pump rates for any of the third through sixth kill attempts." Finally, for the seventh kill attempt, SoCalGas "utilized an engineered approach – some documents indicate that well kill modeling had been attempted prior to the job." The seventh kill attempt would have succeeded according to Blade if the pumping had not been stopped due to equipment problems at the surface. "Each kill attempt caused additional damage to the wellhead and well site." Each kill

Blade concludes that a "transient kill model" would have successfully killed the well and the leak would have been stopped earlier. $\frac{24}{}$

IV. INITIATION OF INVESTIGATION

The Commission has jurisdiction over the entirety of the Aliso Canyon storage facility and DOGGR has jurisdiction down well and for surface facilities serving underground gas storage facilities.

SoCalGas is a large natural gas utility that serves most of southern California's natural gas needs. SoCalGas owns and operates major and technically complex facilities that store large amounts of natural gas and transport large quantities of gas for significant distances. These activities are potentially dangerous to the general public and to SoCalGas employees, especially when the facilities are located in populated areas. Both members of the public and SoCalGas employees are entitled to expect that SoCalGas will store gas as safely as reasonably possible. California law requires Commission-regulated utilities to operate and maintain their facilities safely. Section 451 of the Public Utilities Code in part provides:

²¹ Blade Report at 150.

 $[\]frac{20}{20}$ Blade Report at 149.

²² Blade Report at 152.

²³ Blade Report at 159.

²⁴ Blade Report at 240.

Every public utility shall furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities ... as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.

Because SoCalGas is entrusted to promote and protect the safety of its significant and complex engineering operations, the Commission expects SoCalGas to employ good safety engineering practices to its potentially dangerous natural gas storage facilities. The Commission's expectation applies to design, construction, operations, testing, maintenance, inspection, and risk assessment and pipe and well abandonment and or replacement.

As listed above, Blade has identified several aspects of SoCalGas' operation and maintenance of the Aliso Canyon storage facility, related root causes of the failure of SS-25, and SoCalGas' failure to kill SS-25 earlier than it ultimately did that reduced safety in and around the Aliso Canyon storage facility. The identified facts, if true, lead to a concern that SoCalGas may have failed to comply with Public Utilities Code section 451.

The Blade Report raises serious safety concerns about the adequacy of SoCalGas' practices regarding these issues and convinces us an investigation should commence immediately.

The Commission institutes this formal proceeding pursuant to the Commission's Rules of Practice and Procedure (Rules), Rule 5.1. SoCalGas is ordered to show cause why it should not be sanctioned for allowing the uncontrolled release of natural gas from its Aliso Canyon storage facility. Further, SoCalGas is put on notice that we will consider the concerns raised in the Blade Report, as well as the implications of those concerns related to SoCalGas's operations and maintenance, and its record-keeping, to determine if these issues represent violations of any provision(s) of the California Public Utilities Code, Commission General Orders or decisions, or other applicable laws, rules or requirements.

V. PRELIMINARY SCOPING MEMO

Rule 7.1(c) provides that an OII shall attach a preliminary scoping memo. The following discussion meets this requirement.

A. Issues

The scope of the issues to be determined in this proceeding are preliminarily determined to be:

- 1. Did SoCalGas violate Public Utilities Code Section 451 for allowing the uncontrolled release of natural gas from its Aliso Canyon storage facility?
- 2. Did SoCalGas violate any provisions of the Public Utilities Code, General Orders, Commission decision, or any other applicable regulations with respect to its maintenance and operation of the Aliso Canyon storage facility or its recordkeeping practices?
- 3. Should SoCalGas be sanctioned for allowing the uncontrolled release of natural gas from its Aliso Canyon storage facility?
- 4. What penalties, in the form of fines, remedies and other corrective actions, should be imposed for any proven violation(s) found above pursuant to PU Code §§ 701, 761, 2107 and 2108?

B. Schedule of Proceeding

The Commission intends to set a prehearing conference to consider and adopt a hearing schedule and to schedule other matters for this proceeding.

Within 30 days of the mailing date of this Order, Respondent shall file and serve a response to this OII. Responses on this preliminary scoping memo may also be filed and served within 30 days of the date this OII is issued. Pursuant to Rule 5.2, responses shall state "any objections to the preliminary scoping memo regarding the need for hearing, issues to be considered, or schedule." Replies to responses may be filed and served within 10 days of the due date for responses.

Pursuant to Rule 7.2, the Assigned Commissioner shall set a prehearing conference for 45 to 60 days after the initiation of this proceeding or as soon as practicable after the Commission makes the assignment. The Assigned Commissioner

will also issue a scoping memo setting forth the scope of the proceeding and establishing a procedural schedule.

Appeal of Categorization	10 days after issuance of this OII
SoCalGas response to OII	30 days after issuance of this OII
Responses on scope and issues in Preliminary Scoping Memo due	30 days after issuance of this OII
Replies to Comments on issues in Preliminary Scoping Memo due	10 days after Responses on scope and issues in the Preliminary Scoping Memo are due
Prehearing Conference	To be scheduled by the assigned Commissioner 45 to 60 days after the initiation of this proceeding

C. Categorization of Proceeding

Commission Rule 7.1 (c) specifies that an "order instituting investigation shall determine the category of the proceeding [and] preliminarily determine the need for hearing." This investigation is categorized as adjudicatory as defined in Rule 1.3 (a). We expect disputed issues of material fact and therefore preliminarily determine that evidentiary hearings will be necessary. Pursuant to Commission Rule 7.6, appeals of the categorization of this investigation, if any, are to be filed within 10 days of the date this OII is issued.

D. Other Matters

The Commission requests that SoCalGas reimburse the state for the cost accrued by the Commission staff or by its consultants for its investigation into the release of natural gas from the Aliso Canyon storage facility and for any other matters pertaining to SoCalGas's operations and maintenance of its natural gas facilities, and for prosecution of the investigation. The Commission staff has devoted major resources to the investigation of the Aliso Canyon gas leak and expects to continue so doing.

The facts and circumstances presented to the Commission provide no justification to conclude that taxpayers or that any entity other than SoCalGas should bear the costs of

the investigation into the release of natural gas from the Aliso Canyon storage facility and its causes, regardless of whether the investigation pertains to SoCalGas's operations and maintenance or to other possible issues. If SoCalGas disagrees, the company is directed to provide its support for a contrary view. SoCalGas shall file its position by July 12, 2019 and is directed to state its agreement or objection to pay for costs of the Commission staff investigation. If SoCalGas does not agree on July 12 to bear these costs, the Commission will set a prompt procedure to hear SoCalGas and interested parties to this proceeding, and to decide the matter quickly. If the Commission directs SoCalGas to pay for investigation and prosecution costs, we also intend at an appropriate time to decide whether SoCalGas ratepayers or shareholders, or both, should bear the costs.

Finally, we direct SoCalGas to extend its contract with Blade. As discussed previously, SoCalGas retained Blade on January 26, 2016 at the direction of the Commission, to perform its independent RCA. This contract is set to terminate on June 30, 2019. With the opening of this investigation, Blade will be needed to explain its analysis and conclusions in the RCA to the Commission and assigned Administrative Law Judge. Therefore, SoCalGas is directed to extend the Blade contract, commencing on July 1, 2019, on a time and materials basis until otherwise directed. As with the other costs for this investigation, we will decide at an appropriate time whether SoCalGas ratepayers or shareholders, or both, should bear the costs. To ensure that this has been done, a Senior Officer shall send a letter to the Deputy Executive Director, Safety and Enforcement, by July 1, 2019 affirming that the contract has been or is being extended and there has been no lapse in Blade's services.

VI. PARTIES AND SERVICE LIST

SoCalGas is named as a Respondent to this investigation. SED is named as a party to this proceeding. The initial service list for this proceeding is set forth in an Ordering Paragraph and includes SoCalGas and SED. The official list may be updated with additional parties.

VII. PUBLIC ADVISOR

Any person or entity interested in participating in this investigation who is unfamiliar with the Commission's procedures should contact the Commission's Public Advisor's Office in San Francisco at (866) 849-8390, or email public.advisor@cpuc.ca.gov. The TTY number is (866) 836-7825. Written communication may be sent to the Public Advisor, California Public Utilities Commission, 505 Van Ness Avenue, San Francisco, CA 94102.

VIII. INTERVENOR COMPENSATION

A party that expects to request intervenor compensation for its participation in this proceeding shall file its notice of intent to claim intervenor compensation in accordance with Rule 17.1.

IX. EX PARTE COMMUNICATIONS PROHIBITED

Article 8 of the Commission's Rules of Practice and Procedure applies to all communications with decision makers and advisors regarding the issues in this proceeding. This proceeding is categorized as adjudicatory and Rule 8.3(b) prohibits all *ex parte* communications.

Therefore, IT IS ORDERED that:

- 1. An investigation is instituted on the Commission's own motion to determine whether Southern California Gas Company violated any provision of the California Public Utilities Code, general orders, federal law adopted by California, other laws, rules, or requirements.
- 2. Southern California Gas Company is named as Respondent to this investigation.
- 3. The Commission's Safety and Enforcement Division is a party to this investigation.
- 4. Respondent Southern California Gas Company (SoCalGas) is directed to show at hearings why the Commission should not find it in violation of provisions of the Public Utilities Code (Pub. Util. Code), general orders, decisions, other rules, or

requirements identified in this Order, and/or engaging in unreasonable and/or imprudent practices related to these matters. If any violation by SoCalGas is found, SoCalGas is directed to show why penalties, in the form of fines and/or any other form of relief should not be applied.

- 5. Southern California Gas Company is hereby given notice that penalties may be imposed in this matter pursuant to Pub. Util. Code §§ 2107 and 2108.
- 6. Southern California Gas Company is hereby given notice that the Commission may order SoCalGas to implement measures designed to prevent future gas hazards to safety pursuant to Pub. Util. Code § 761.
- 7. Pursuant to Rule 7.1(c), this proceeding is categorized as adjudicatory, deemed to require hearings, and this Order includes a preliminary scoping memo. This Order, only as to category, is appealable under Rule 7.6.
- 8. The preliminary scope of issues for this Investigation is as stated in this Order.
- 9. A prehearing conference shall be convened before an Administrative Law Judge (ALJ) for the purpose of establishing a schedule in this matter, including the date, time, and location of an evidentiary hearing, and for good cause shown the ALJ and/or Assigned Commissioner may extend the deadlines specified herein, for any particular responses required.
- 10. The assigned Commissioner or Administrative Law Judge may adjust the schedule identified herein.
- 11. Southern California Gas Company shall file a response by July 12, 2019 stating its agreement or objection to pay for costs of the Commission staff investigation.
- 12. Southern California Gas Company shall extend its current contract with Blade Energy Partners Limited commencing on July 1, 2019, on a time and materials basis until otherwise directed. A Senior Officer shall send a letter to the Deputy Executive Director, Safety and Enforcement, by July 1, 2019 affirming that the contract has been or is being extended and there has been no lapse in Blade's services.

- 13. A party that expects to request intervenor compensation for its participation in this investigation shall file its notice of intent to claim intervenor compensation in accordance with Rule 17.1.
 - 14. Ex parte communications are prohibited as set forth in Rule 8.2(b).
- 15. The Executive Director shall cause a copy of this Order to be served electronically and by certified mail on the Respondent, Southern California Gas Company and a hard copy to each person listed below:

Jeffrey W. Martin Chairman and CEO Sempra Energy 488 Eighth Ave. San Diego, CA 92101 Maryam Brown President Southern California Gas Company 555 W. 5th Street Los Angeles, CA 90013

Dan Skopec Vice President, Regulatory Affairs Southern California Gas Company 8326 Century Park Court San Diego, CA 92123 Bret Lane Chairman and CEO Southern California Gas Company 555 W. 5th Street Los Angeles, CA 90013

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Dated June 27, 2019 at San Francisco, California.

MICHAEL PICKER
President
LIANE M. RANDOLPH
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
GENEVIEVE SHIROMA
Commissioners